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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KRISHNA KISHORE DHARA, VENKATESH KRISHNASWAMY, and SARANGKUMAR JAGDISHCHANDRA ANAJWALA

> Appeal 2020-001688 Application 13/918,356 Technology Center 3600

Before MICHAEL J. STRAUSS, DAVID J. CUTITTA II, and PHILLIP A. BENNETT, *Administrative Patent Judges*.

BENNETT, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1, 3–8, 10–15, and 17–23. Claims 2, 9, and 16 are cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Avaya Inc. Appeal Br. 2.

CLAIMED SUBJECT MATTER

The claims are directed to contextual calendaring based meeting scheduling, which "can schedule meetings with varying states of blocking time slots based on users' behavior with respect to the participants, topics, and tasks or context of the meeting." Spec. Abstract. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method comprising:

mining, by a processor of a server, context information associated with a calendar event from multiple sources, the sources comprising at least one recurring calendar event related to the calendar event and at least two of a transcribed text from a telephone call, a recurring telephone call pattern, an email, an instant message, a text message, a voicemail message, a video chat, a collaboration session, and a shared file, wherein the context information relates to desired attendees for the calendar event;

identifying, via the processor, based on the context information, a plurality of desired attendees for the calendar event;

ranking, via the processor, the plurality of desired attendees according to priority scores assigned, based on the context information, to the plurality of desired attendees in association with the calendar event, to yield priority rankings;

placing, via the processor, a conditional hold on a time slot on a calendar of one of the plurality of desired attendees based on the priority rankings;

associating, via the processor, the conditional hold with the calendar event;

generating, via the processor, a new calendar event dialog for creating the calendar event, the new calendar event dialog comprising an attendees field populated with at least part of the plurality of desired attendees based on the priority rankings; and causing, via the processor, the new calendar event dialog to be displayed via a user interface of a client device.

Appeal Br. 14 (Claims Appendix).

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Cragun	US 2003/0149606 A1	Aug. 7, 2003
Desai	US 2007/0124371 A1	May 31, 2007
Sherman	US 2009/0041221 A1	Feb. 12, 2009
Chakra	US 2009/0307045 A1	Dec. 10, 2009
Goldsmith	US 9,754,243 B2	Sept. 05, 2017

REJECTIONS

Claims 1, 3–8, 10–15, and 17–23 stand rejected under 35 U.S.C. § 101 as being directed to ineligible subject matter. Final Act. 9.

Claims 1, 3–8, 10–15, and 17–23 stand rejected under 35 U.S.C. § 103 as being unpatentable over Chakra, Desai, Goldsmith, Sherman, and Cragun. Final Act. 13.

REJECTION UNDER 35 U.S.C. § 101

Standard for Patent Eligibility

In issues involving subject matter eligibility, our inquiry focuses on whether the claims satisfy the two-step test set forth by the Supreme Court in *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208 (2014). The Court instructs us to "first determine whether the claims at issue are directed to a patent-ineligible concept," *id.* at 218, and, in this case, the inquiry centers on whether the claims are directed to an abstract idea. If the initial threshold is met, we then move to the second step, in which we "consider the elements of

each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Id.* at 217–18 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 79, 78 (2012)). The Court describes the second step as a search for "an "inventive concept"—*i.e.*, an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Id.* (quoting *Mayo*, 566 U.S. at 72–73).

The USPTO has published revised guidance on the application of § 101 consistent with *Alice* and subsequent Federal Circuit decisions.

USPTO, 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed.

Reg. 50 (Jan. 7, 2019) ("Guidance"), updated by USPTO, October 2019

Update: Subject Matter Eligibility (available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf) ("October 2019

Guidance Update").

Under the Guidance, we first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes) (referred to Step 2A, prong 1 in the Guidance); and
- (2) additional elements that integrate the judicial exception into a practical application (see MPEP § 2106.05(a)–(c), (e)–(h)) (referred to Step 2A, prong 2 in the Guidance).

See Guidance, 84 Fed. Reg. at 52–55. Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then move to Step 2B of the Guidance. There, we look to whether the claim:

- (3) adds a specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field (see MPEP § 2106.05(d)); or
- (4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See Guidance, 84 Fed. Reg. at 56.

Examiner's Findings and Conclusions²

The Examiner rejects claim 1 as being directed to a judicial exception without significantly more under *Alice* and also under the Guidance. Final Act. 9–12 (under *Alice*); Ans. 3–5 (under Step 2A, prong one of the Guidance). Under the first step of the *Alice* inquiry, the Examiner determines claim 1 is directed to a judicial exception. Final Act. 9. Specifically, the Examiner determines that claim 1 is directed to "scheduling," which the Examiner determines is a certain method of organizing human activity under the Guidance because "the claims manage personal behavior or relationships or interactions between people." Ans. 3.

Under Step 2A, prong two of the Guidance the Examiner determines that "[t]he use of a processor and user interface of a client device for receiving data, transmitting data, processing data (i.e. generating a calendar event), displaying data (i.e. displaying the new calendar event dialog) and

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² The Final Office Action in this appeal was mailed prior to the issuance of the Guidance, and applied the case law-based approach from previous eligibility guidance in rejecting the claims under § 101. Appellant's Briefs and the Examiner's Answer were filed and mailed subsequent to the issuance of the Guidance, and address the issues in view of the Guidance. Likewise, our analysis of the § 101 rejection is made under the Guidance, which is applicable to "all applications . . . filed before, on, or after January 7, 2019." Guidance 50.

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repeating steps is merely implementing the abstract idea" using a computer as a tool. Ans. 4.

Under Step 2B, the Examiner determines the additional limitations of a processor and a user interface are not considered 'significantly more' than the abstract idea because they are well-understood, routine, and conventional. Ans. 4–5 (citing Spec., Fig. 8; ¶¶ 42–51). The Examiner explains:

From the interpretation of the Applicant's Specification, the additional elements are recited at a high level of generality and are recited as performing generic computer function routinely used in computer. Further, the additional elements do not provide improvement to the computer itself, technology nor a technical field, and further the claimed subject matter is not transformed into a different state or thing. Viewed as a whole, these additional claim elements do not provide meaningful limitations to transform the abstract idea significantly more than the abstract idea itself.

Ans. 5.

Appellant's Contentions

Appellant argues the claims do not fall under any of the enumerated groupings of Step 2A, prong one. Appeal Br. 7–8, Reply Br. 2. Specifically, Appellant argues "the claims do not involve organizing or generating events," and they instead "relate to generating a 'calendar event dialog' with an 'attendees field populated with . . . desired attendees' and causing a new calendar event dialog to be displayed." Reply Br. 2. According to Appellant, "the claims recite functions executed by a computer application in creating a calendar event with desired attendees," and therefore do not recite any judicial exception. Reply Br. 2.

Appellant also challenges the determination under Step 2A, prong two, arguing "[t]he independent claims recite features which are integrated into a practical application." Reply Br. 3. Appellant argues "the features which the Examiner found to be equivalent to merely stating 'apply it,' including 'generating a calendar event' and 'displaying the new calendar event dialog' are the very features which integrate the other features into a practical application." Reply Br. 4. Appellant asserts that "by generating a new calendar event dialog comprising an attendees field populated with desired attendees based on priority rankings . . . the system recited in the claim resolves deficiencies and associated problems with conventional systems." Appeal Br. 9.

Appellant also argues for eligibility under Step 2B of the Guidance. Under Step 2B, Appellant argues "the claims are not obvious in view of any of the references cited by the Examiner." Appeal Br. 10. Appellant asserts that, because the Examiner relies on five references in rejecting the claims under § 103, the claims amount to significantly more than the abstract idea. Appeal Br. 10.

Revised Guidance, Step 2A, Prong One³ The Judicial Exception

Applying the Guidance, we are not persuaded the Examiner has erred in determining that the claims recite a judicial exception to patent eligible subject matter. The Guidance identifies three judicially-excepted groupings: (1) mathematical concepts, (2) certain methods of organizing human activity

³ Throughout this opinion, we give the claim limitations the broadest reasonable interpretation consistent with the Specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

such as fundamental economic practices and commercial interactions, and (3) mental processes. We focus our analysis on the second and third groupings—certain methods of organizing human activity and mental processes.⁴

We conclude the limitations of claim 1 recite both a mental process and managing interactions between people (a certain method of organizing human activity), which amounts to a combination of abstract ideas under the Guidance. For example, claim 1 recites (1) "mining . . . context information associated with a calendar event from multiple sources, the sources comprising at least one recurring calendar event related to the calendar event, and at least two of a transcribed text from a telephone call, a recurring telephone call pattern, an email, an instant message, a text message, a voicemail message, a video chat, a collaboration session, and a shared file, wherein the context information relates to desired attendees for the calendar event," and (2) "identifying . . . based on the context information, a plurality of desired attendees for the calendar event," (3) "ranking . . . the plurality of desired attendees according to priority scores

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⁴ Appellant's arguments against the § 101 rejection are made to the claims generally, and we treat claim 1 as representative. 37 C.F.R. § 41.37(c)(1)(iv) (2018) ("When multiple claims subject to the same ground of rejection are argued as a group or subgroup by Appellant, the Board may select a single claim from the group or subgroup and may decide the appeal as to the ground of rejection with respect to the group or subgroup on the basis of the selected claim alone.").

⁵ RecogniCorp, LLC v. Nintendo Co., 855 F.3d 1322, 1327 (Fed. Cir. 2017) ("Adding one abstract idea . . . to another abstract idea . . . does not render the claim non-abstract."); see also FairWarning IP, LLC v. Iatric Sys., Inc., 839 F.3d 1089, 1093–94 (Fed. Cir. 2016) (patent-ineligible claims were directed to a combination of abstract ideas).

assigned, based on the context information, to the plurality of desired attendees in association with the calendar event, to yield priority rankings,"

- (4) "placing . . . a conditional hold on a time slot on a calendar of one of the plurality of desired attendees based on the priority rankings,"
- (5) "associating . . . the conditional hold with the calendar event,"
- (6) "generating . . . a new calendar event dialog for creating the calendar event, the new calendar event dialog comprising an attendees field populated with at least part of the plurality of desired attendees based on the priority rankings," and (7) "causing . . . the new calendar event dialog to be displayed via a user interface of a client device." As a whole, these limitations recite a process for organizing and scheduling a meeting between people by considering competing priorities. As such, these limitations may be categorized as a form of managing interactions between people, which falls within the enumerated group of "certain methods of organizing human activity." Guidance, 84 Fed. Reg. at 52.

Separately, these limitations each recite an abstract mental process under the Guidance because they each can be performed by a human in their mind either through observation, evaluation and judgment, and also because they can be performed by a human with the aid of pen and paper. *See* October 2019 Guidance Update at 7 ("examples of mental processes include observations, evaluations, judgments, and opinions"), 9 ("A claim that encompasses a human performing the step(s) mentally with the aid of a pen and paper recites a mental process") (emphasis omitted). Accordingly, we conclude the claimed process set forth in claim 1 *recites* judicial exceptions of both a mental process and of a commercial interaction, which is a certain method of organizing human activity under the Guidance.

Revised Guidance, Step 2A, Prong Two Integration of the Judicial Exception into a Practical Application

Having determined that claim 1 recites a judicial exception, our analysis under the Guidance turns now to determining whether claim 1 recites any additional elements that integrate the judicial exception into a practical application. *See* Guidance, 84 Fed. Reg. at 54–55 (citing MPEP § 2106.05(a)–(c), (e)–(h)).

Under the Guidance, limitations that are indicative of "integration into a practical application" include:

- 1. Improvements to the functioning of a computer, or to any other technology or technical field see MPEP § 2106.05(a);
- 2. Applying the judicial exception with, or by use of, a particular machine see MPEP § 2106.05(b);
- 3. Effecting a transformation or reduction of a particular article to a different state or thing see MPEP § 2106.05(c); and
- 4. Applying or using the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception *see* MPEP § 2106.05(e).

In contrast, limitations that are not indicative of "integration into a practical application" include:

1. Adding the words "apply it" (or an equivalent) with the judicial exception, or merely include instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea — see MPEP § 2106.05(f);

- 2. Adding insignificant extra-solution activity to the judicial exception see MPEP § 2106.05(g); and
- 3. Generally linking the use of the judicial exception to a particular technological environment or field of use *see* MPEP § 2106.05(h).

See Guidance, 84 Fed. Reg. at 54–55 ("Prong Two").

As shown above, most of the limitations in claim 1 recite abstract ideas. The only limitation in the claim additional to those abstract limitations recites the use of a "server" and performing operations by "a processor." The use of a generic server and processor, however, merely evinces the use of conventional computer technology to implement the otherwise abstract process on a computer. It is well-established that the use of generic technology to implement an abstract idea is insufficient to integrate it into a practical application. *See* MPEP 2106.05(f) (explaining that it is not indicative of integration into a practical application where the claims "merely include instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea").

Appellant argues the claims provide an improvement to the technology of electronic calendars because a new calendar event is generated based on the priority rankings and an event dialog is displayed on a user interface. Appeal Br. 9. We disagree. As we noted above, these limitations are themselves abstract steps carried out in implementing the abstract idea of scheduling a meeting between people by considering competing priorities. Even if these two limitations are not themselves considered abstract, at best, these limitations amount to extra-solution activity. MPEP 2106.05(f) (identifying "printing or downloading generated

menus" as an example of insignificant extra-solution activity). In sum, Appellant's invention is focused on improving the way meetings are scheduled. The purported improvement provided by the claims is not to technology, but instead to how meetings between people are scheduled, i.e., a certain method of organizing human activity, and therefore constitutes an improvement to the abstract idea itself. It is well-established, however, that improvements in the abstract idea are insufficient to confer eligibility on an otherwise ineligible claim. *SAP Am. Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018). We conclude claim 1 is *directed to* a judicial exception under step 2A, prong 2, of the Guidance.

The Inventive Concept – Step 2B

Having determined the claim is directed to a judicial exception, we proceed to evaluating whether claim 1 adds a specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field (see MPEP § 2106.05(d)) or simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception. See Guidance, 84 Fed. Reg. at 56.

Our review of the Examiner's rejection under Step 2B is guided by the *Berkheimer Memorandum*, which sets forth what fact finding requirements are applicable to rejections under § 101. Consistent with the *Berkheimer Memorandum*, we agree with the Examiner that claim 1 does not add specific limitations beyond what is well-understood, routine, and conventional.

Our analysis focuses largely on the same limitations addressed in Step 2A, prong 2, above. We agree with the Examiner that the addition of a generic "server" and "processor" does not supply an inventive concept under Step 2B because the server is described at a high level, in functional terms, without any detail in the Specification regarding how those functions are achieved. Spec. ¶¶ 28–29 (describing server in functional terms about what it does, without details about how it does it). This lack of detailed description evidences the well-understood, routine, and conventional nature of the recited "server."

Because the Examiner correctly concluded claim 1 is directed to a judicial exception, and because Appellant does not identify any error in the Examiner's determination under step 2B of the Guidance, we sustain the rejection of representative claim 1 under 35 U.S.C. § 101, as well as of the remaining claims.

REJECTION UNDER 35 U.S.C. § 103

The Examiner rejects the claims as being obvious over Chakra, Desai, Goldmith, Sherman, and Cragun. Final Act. 13–20.

"mining . . . context information"

Relevant to the first of two issues raised by Appellant, the Examiner finds the "mining" limitation of claim 1 is taught by Chakra, Desai, and Goldsmith. In particular, the Examiner finds Desai teaches mining context information from multiple sources, including those listed in the limitation. Final Act. 15. The Examiner finds that Chakra teaches determining desired meeting attendees for a calendar event. Final Act. 14. The Examiner further cites Goldsmith for the limitation of "the sources comprising at least one recurring calendar event related to the calendar event." Final Act. 17.

Appellant argues the Examiner has erred in determining the "mining" limitation would have been obvious over the cited prior art. Appeal Br. 11.

Appellant broadly argues "[n]o cited reference teaches mining context information associated with a calendar event from multiple sources as claimed" (Appeal Br. 11), and offers specific arguments which we address in turn.

Appellant contends "Chakra teaches only identifying participants based on a topic of a meeting—not "context information associated with a calendar event from multiple sources." Appeal Br. 11. We do not find this argument persuasive because the Examiner does not rely on Chakra for "context information . . . from multiple sources." Rather, the Examiner relies on Desai as teaching mining context information from multiple sources, and relies on Chakra for teaching "associated with a calendar event." Ans. 6 ("It is first noted that Chakra's disclosure [that] discloses a calendar management server that identifies a set of desired participants for a meeting based on a meeting topic is more than sufficient to teach . . . 'wherein the context information relates to desired attendees for the calendar event.'") (citing Chakra, Abstract, ¶ 36). That is, the Examiner relies on Chakra as teaching scheduling of calendar events with desired attendees, and Desai as teaching mining context information from sources in connection with calendar scheduling.

Appellant also argues the Desai is deficient because "Desai teaches only creating a 'scheduling entry' . . . based on an 'incoming communication.' The 'context information of the claim 'relates to desired attendees for the calendar event.' This element is neither taught nor suggested by Desai." Appeal Br. 11. We do not find this argument persuasive because the Examiner relies on Chakra for "desired attendees for

the calendar event." Ans. 6. As such, Appellant's argument does not address the findings and rejection made by the Examiner.

Appellant further argues Goldsmith fails to teach "at least one related recurring calendar event." Appeal Br. 12. We do not find this argument persuasive. Goldsmith teaches that data records may be analyzed in order to detect recurring calendar events and utilize that information for contextual scheduling purposes. Goldsmith col. 15, l. 35–col. 16, l. 23.

In short, the Examiner relies on Desai to demonstrate that it was known to parse information from multiple sources in order to retrieve contextual information for scheduling a meeting, relies on Goldsmith as demonstrating that is was known to detect and analyze recurring calendar events, and relies on Chakra to show that is was known to use a calendar management server to identify desired participants for a meeting. Ans. 7–8. As such, we are not persuaded the Examiner erred in determining the "mining" limitation is taught or suggested by the combination of the cited prior art.

"ranking . . . the plurality of desired attendees"

Claim 1 recites the limitation "ranking, via the processor, the plurality of desired attendees according to priority scores assigned, based on the context information, to the plurality of desired attendees in association with the calendar event, to yield priority rankings." The Examiner finds that Chakra's identification of desired attendees does not explicitly teach this limitation, but that the recited prioritization is taught by Sherman. Final Act. 17–18.

Appellant argues "no reference teaches or suggests the 'ranking' step as recited in the claim." Appeal Br. 12. Appellant asserts that Sherman

deals with prioritization of phone calls, and not calendar events. Appeal Br. 13. Appellant further argues that "[e]ven if a phone call could be equated to a calendar event, Sherman does not teach or suggest ranking a plurality of desired attendees as recited in the claim." Appeal Br. 13.

We are not persuaded of error. As the Examiner explains in the Answer, the combined teachings of Chakra and Sherman are relied upon for the "ranking" limitation. Ans. 8. Specifically, Chakra is relied upon for teaching the calendar event and the selection of desired attendees. Sherman evinces that it was known to assign priority scores for scheduled phone calls based on context information. Appellant's arguments do not address the teachings of Chakra. Taken together, we agree with the Examiner that the combination of Chakra and Sherman renders obvious the argued limitation.

CONCLUSION

We affirm the Examiner's decision to reject the claims.

DECISION SUMMARY

Claims	35 U.S.C.	Reference(s)/Basis	Affirmed	Reversed
Rejected	§			
1, 3–8, 10–	101	Eligibilty	1, 3–8, 10–	
15, 17–23			15, 17–23	
1, 3–8, 10–	103	Chakra, Desai,	1, 3–8, 10–	
15, 17–23		Goldsmith,	15, 17–23	
		Sherman, Cragun		
Overall			1, 3–8, 10–	
Outcome			15, 17–23	

TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

<u>AFFIRMED</u>